**WHAT IS CLAIMED IS:**

1. A fiber optic communication assembly, comprising:

an optical communication module having a plurality of at least three fiber optic ports, said plurality of fiber optic ports being configured as an array, at least a first one of said plurality of fiber optic ports being signal-independent from at least a second one of said fiber optic ports;

a plurality of fiber optic conductors each having a first end and a second end providing an optical communication path therebetween, each of said plurality of fiber optic conductors being coupled at its first end to one of said plurality of fiber optic ports, said first ends of said plurality of fiber optic conductors being disposed in adjacent parallel relationship at said plurality of fiber optic ports;

wherein a first one of said fiber optic conductors is coupled to said first one of said plurality of fiber optic ports to form a first signal-independent optical communication path, and wherein a second one of said plurality of fiber optic conductors is coupled to said second one of said plurality of fiber optic ports to form a second signal independent optical communication path; and

wherein said second end of said first fiber optic conductor is configured to be disposed in remote physical relationship to said second end of said second fiber optic conductor.

2. The fiber optic communication assembly of claim 1, wherein each of said plurality of fiber optic ports is signal-independent from all other of said plurality of fiber optic ports.

3. The fiber optic communication assembly of claim 1, wherein a second end of each of said plurality of fiber optic conductors is configured to be disposed in physically remote relationship from the second ends of all other of said plurality of fiber optic conductors.

4. The fiber optic communication assembly of claim 3, wherein each of said plurality of fiber optic ports is signal-independent from all other of said plurality of fiber optic ports.

5. The fiber optic communication assembly of claim 1, wherein at least one of said first or second signal-independent optical communication paths is configured to communicate a plurality of multiplexed optical signals using wavelength division multiplexing.

6. The fiber optic communication assembly of claim 1, wherein said first optical communication path comprises a first standards-compliant optical communication path; and wherein said second optical communications path comprises a second standards-compliant optical communication path.

7. The fiber optic communication assembly of claim 1, wherein said first optical communication path is compliant with a first standard, wherein said second optical communications path is compliant with a second standard, said first and second standards being different from each other.

8. The fiber optic communication assembly of claim 1, wherein said optical communication module comprises at least one of an optical communication transmitter module, an optical communication receiver module, or an optical communication transceiver module.

9. The fiber optic communication assembly of claim 2, wherein said optical communication module comprises an optical communication transmitter module, each of said plurality of fiber optic ports coupled to a separate signal-independent transmitter; or

wherein said optical communication module comprises an optical communication receiver module, each of said plurality of fiber optic ports coupled to a separate signal-independent receiver; or

wherein said optical communication module comprises an optical transceiver module, each of a portion of said plurality of fiber optic ports coupled to a separate signal-independent transmitter and each of the remaining portion of said plurality of fiber optic ports coupled to a separate signal-independent receiver.

10. The fiber optic communication assembly of claim 1, wherein said optical communication module comprises a VCSEL optical communication array module having said plurality of fiber optic ports and a wavelength in the range of from about 1260nm to about 1660nm.

11. The fiber optic communication assembly of claim 10, wherein said first ends of said plurality of fiber optic conductors are configured as a multiple fiber connector; wherein said plurality of fiber optic ports of said optical communication module are configured in an array having dimensions suitable for interconnection with said plurality

of fiber optic conductors of said multiple fiber connector; said multiple fiber connector being interconnected with said array to couple the first end of each of said plurality of fiber optic conductors to one of said plurality of fiber optic ports of said optical communication module.

12. The fiber optic communication assembly of claim 11, wherein said multiple fiber connector comprises a MTP™ connector.

13. The fiber optic communication assembly of claim 1, wherein said plurality of fiber optic ports of said optical communication module are configured as an array having a density of about 0.1 inch per port.

14. The fiber optic communication assembly of claim 1, wherein said plurality of fiber optic ports of said optical communication module are configured as a single-wafer array.

15. An optical communication system, comprising:

a first optical communication module having a plurality of at least three fiber optic ports, said plurality of fiber optic ports being configured as an array, at least a first one of said plurality of fiber optic ports being signal-independent from at least a second one of said fiber optic ports;

a plurality of fiber optic conductors each having a first end and a second end providing an optical communication path therebetween, each of said plurality of fiber optic conductors being coupled at its first end to one of said plurality of fiber optic ports, said first ends of said plurality of fiber

optic conductors being disposed in adjacent parallel relationship at said plurality of fiber optic ports;

wherein a first one of said fiber optic conductors is coupled to said first one of said plurality of fiber optic ports to form a first signal-independent optical communication path, and wherein a second one of said plurality of fiber optic conductors is coupled to said second one of said plurality of fiber optic ports to form a second signal independent optical communication path; and

wherein said second end of said first fiber optic conductor is coupled to a first fiber optic port of a second communication module to form said first signal-independent optical communication path between said first communication module and said second communication module; and wherein said second end of said second fiber optic conductor is coupled to a first fiber optic port of a third communication module to form said second signal-independent optical communication path between said first communication module and said third communication module.

16. The fiber optic communication assembly of claim 15, wherein said first optical communication path comprises a first standards-compliant optical communication path; and wherein said second optical communications path comprises a second standards-compliant optical communication path.

17. The fiber optic communication assembly of claim 16, wherein said first optical communication path is compliant with a first standard, wherein said second optical communications path is compliant with a second standard, said first and second standards being different from each other.

18. The optical communication system of claim 16, wherein said first optical communication module comprises an optical communication transmitter module; and wherein said second and third optical communication modules each comprise an optical communication receiver module or an optical communication transceiver module.

19. The optical communication system of claim 16, wherein said first optical communication module comprises an optical communication receiver module; and wherein said second and third optical communication modules each comprise an optical communication transmitter module or an optical communication transceiver module.

20. The optical communication system of claim 16, wherein said first optical communication module comprises an optical communication transceiver module; and wherein said second and third optical communication modules each comprise an optical communication transmitter module, an optical communication receiver module, or an optical communication transceiver module.

21. The optical communication system of claim 16, wherein at least one of said first or second signal-independent optical communication paths is configured to communicate a plurality of multiplexed optical signals using wavelength division multiplexing.

22. The optical communication system of claim 16, wherein said second optical communication module has a plurality of fiber optic ports configured as an array; and wherein said first fiber optic port of said second communication module is signal-independent from other fiber optic ports of said second communication module array.

23. The optical communication system of claim 16, wherein each of said plurality of fiber optic ports of said first optical communication module is signal-independent from all other of said plurality of fiber optic ports of said first optical communication module.

24. The optical communication system of claim 16, wherein said first optical communication module comprises an optical communication transmitter module, each of said plurality of fiber optic ports coupled to a separate signal-independent transmitter, and wherein said second and third optical communication modules each comprise an optical communication receiver module or an optical communication transceiver module, each of said first fiber optic ports of said second and third communication modules comprising a separate signal-independent receiver or transmitter; or

wherein said first optical communication module comprises an optical communication receiver module, each of said plurality of fiber optic ports coupled to a separate signal-independent receiver, and wherein said second and third optical communication modules each comprise an optical communication transmitter module or an optical communication transceiver module, each of said first fiber optic ports of said second and third communication modules comprising a separate signal-independent transmitter or receiver; or

wherein said first optical communication module comprises an optical transceiver module, each of a portion of said plurality of fiber optic ports coupled to a separate signal-independent transmitter and each of the remaining portion of said plurality of fiber optic ports coupled to a separate signal-independent receiver, and wherein said second and third optical communication modules each comprise an optical communication transmitter module, an optical communication receiver module, or an optical communication transceiver module, each of said first fiber optic

ports of said second and third communication modules comprising a separate signal-independent transmitter or receiver.

25. The optical communication system of claim 22, wherein each of said first and second optical communication modules comprises a VCSEL optical communication array module having a plurality of fiber optic ports and a wavelength in the range of from about 1260nm to about 1660nm.

26. The optical communication system of claim 25, wherein said first ends of said plurality of fiber optic conductors are configured as a first multiple fiber connector; wherein said plurality of fiber optic ports of said first optical communication module are configured in an array having dimensions suitable for interconnection with said plurality of fiber optic conductors of said first multiple fiber connector; said first multiple fiber connector being interconnected with said array to couple the first end of each of said plurality of fiber optic conductors of said first multiple fiber connector to one of said plurality of fiber optic ports of said first optical communication module; and

wherein said second end of said first one of said fiber optic conductors is configured with second ends at least one other fiber optic conductor as a second multiple fiber connector having a plurality of fiber optic conductors; wherein said plurality of fiber optic ports of said second optical communication module are configured in an array having dimensions suitable for interconnection with said plurality of fiber optic conductors of said second multiple fiber connector; said second multiple fiber connector being interconnected with said array to couple the second end of each of said plurality of fiber optic conductors of said second multiple fiber connector to one of said plurality of fiber optic ports of said second optical communication module.

27. The optical communication system of claim 26, wherein said first and second multiple fiber connectors each comprises a MTP™ connector.

28. The optical communication system of claim 16, wherein said first, second and third optical communication modules comprise at least a part of a fiber optic network.

29. The optical communication system of claim 28, wherein said fiber optic network comprises at least one of a local area fiber optic network, a metropolitan fiber optic network, or a combination thereof.

30. The optical communication system of claim 25, wherein said system comprises at least a part of a SONET metropolitan fiber optic network.

31. The optical communication system of claim 15, wherein said plurality of fiber optic ports of said first optical communication module are configured as an array having a density of about 0.1 inch per port.

32. The optical communication system of claim 15, wherein said plurality of fiber optic ports of said first optical communication module are configured as a single-wafer array.

33. A method of optical communication, comprising:

providing an optical communication module having a plurality of at least three fiber optic ports, said plurality of fiber optic ports being configured as an array and being coupled to plurality of fiber optic conductors each having a first end and a second end providing an optical communication path therebetween, each of said plurality of fiber optic conductors being coupled at its first end to one of said plurality of fiber optic ports, said first ends of said plurality of fiber optic conductors being disposed in adjacent parallel relationship at said plurality of fiber optic ports, wherein a first one of said fiber optic conductors is coupled to a first one of said plurality of fiber optic ports to form a first optical communication path, and wherein a second one of said plurality of fiber optic conductors is coupled to a second one of said plurality of fiber optic ports to form a second optical communication path, said second end of said first fiber optic conductor being disposed in remote physical relationship to said second end of said second fiber optic conductor; and

transmitting or receiving a first optical signal at said first fiber optic port of said first optical communication module through said first optical conductor, said first optical signal being signal-independent from an optical signal transmitted or received at said second fiber optic port of said first optical communication module.

34. The method of claim 23, wherein said method further comprises transmitting or receiving said first optical signal as one of plurality of multiplexed optical signals using wavelength division multiplexing.

35. The method of claim 33, wherein a second end of said first one of said fiber optic conductors is coupled to a first fiber optic port of a second communication module to form said first optical communication path between said first communication module and

said second communication module; and wherein a second end of said second one of said fiber optic conductors is coupled to a first fiber optic port of a third communication module to form said second optical communication path between said first communication module and said third communication module.

36. The method of claim 35, wherein said method comprises transmitting said first optical signal from said first fiber optic port of said first optical communication module through said first optical conductor to said first fiber optic port of said second optical communication module; or wherein said method comprises receiving said first optical signal at said first fiber optic port of said first optical communication module, said first optical signal being transmitted from said first fiber optic port of said second optical communication module through said first optical conductor to said first fiber optic port of said first optical communication module.

37. The method of claim 36, wherein said transmitting or said receiving is performed in a standards-compliant manner.

38. The method of claim 37, wherein said first optical communication module comprises an optical communication transmitter module; and wherein said second and third optical communication modules each comprise an optical communication receiver module or an optical communication transceiver module.

39. The method of claim 37, wherein said first optical communication module comprises an optical communication receiver module; and wherein said second and third optical communication modules each comprise an optical communication transmitter module or an optical communication transceiver module.

40. The method of claim 37, wherein said first optical communication module comprises an optical communication transceiver module; and wherein said second and third optical communication modules each comprise an optical communication transmitter module, an optical communication receiver module, or an optical communication transceiver module.

41. The method of claim 37, wherein said second optical communication module has a plurality of fiber optic ports configured as an array; and

wherein said method further comprises receiving said first optical signal at said first fiber optic port of said second communication module in a manner that is signal-independent from other optical signals received or transmitted at other fiber optic ports of said second communication module array; or

wherein said method comprises transmitting said first optical signal at said first fiber optic port of said second communication module in a manner that is signal-independent from other optical signals received or transmitted at other fiber optic ports of said second communication module array.

42. The method of claim 35, wherein said method further comprises transmitting or receiving a separate optical signal in each of said plurality of fiber optic ports of said first optical communication module in a manner that is signal-independent from all other of said plurality of fiber optic ports of said first optical communication module.

43. The method of claim 37, wherein said first optical communication module comprises an optical communication transmitter module, each of said plurality of fiber optic ports coupled to a separate signal-independent transmitter, and wherein said second

and third optical communication modules each comprise an optical communication receiver module or an optical communication transceiver module, each of said first fiber optic ports of said second and third communication modules comprising a separate signal-independent receiver or transmitter.

44. The method of claim 37, wherein said first optical communication module comprises an optical communication receiver module, each of said plurality of fiber optic ports coupled to a separate signal-independent receiver, and wherein said second and third optical communication modules each comprise an optical communication transmitter module or an optical communication transceiver module, each of said first fiber optic ports of said second and third communication modules comprising a separate signal-independent transmitter or receiver.

45. The method of claim 37, wherein said first optical communication module comprises an optical transceiver module, each of a portion of said plurality of fiber optic ports coupled to a separate signal-independent transmitter and each of the remaining portion of said plurality of fiber optic ports coupled to a separate signal-independent receiver, and wherein said second and third optical communication modules each comprise an optical communication transmitter module, an optical communication receiver module, or an optical communication transceiver module, each of said first fiber optic ports of said second and third communication modules comprising a separate signal-independent transmitter or receiver.

46. The method of claim 41, wherein each of said first and second optical communication modules comprises a VCSEL optical communication array module having a plurality of fiber optic ports and a wavelength in the range of from about 1260nm to about 1660nm.

47. The method of claim 46, wherein said first ends of said plurality of fiber optic conductors are configured as a first multiple fiber connector; wherein said plurality of fiber optic ports of said first optical communication module are configured in an array having dimensions suitable for interconnection with said plurality of fiber optic conductors of said first multiple fiber connector; said first multiple fiber connector being interconnected with said array to couple the first end of each of said plurality of fiber optic conductors of said first multiple fiber connector to one of said plurality of fiber optic ports of said first optical communication module; and

wherein said second end of said first one of said fiber optic conductors is configured with second ends at least one other fiber optic conductor as a second multiple fiber connector having a plurality of fiber optic conductors; wherein said plurality of fiber optic ports of said second optical communication module are configured in an array having dimensions suitable for interconnection with said plurality of fiber optic conductors of said second multiple fiber connector; said second multiple fiber connector being interconnected with said array to couple the second end of each of said plurality of fiber optic conductors of said second multiple fiber connector to one of said plurality of fiber optic ports of said second optical communication module.

48. The method of claim 47, wherein said first and second multiple fiber connectors each comprises a MTP™ connector.

49. The method of claim 37, wherein said first, second and third optical communication modules comprise at least a portion of a fiber optic network.

50. The method of claim 49, wherein said fiber optic network comprises at least one of a local area fiber optic network, a metropolitan fiber optic network, or a combination thereof.

51. The method of claim 46, wherein said system comprises at least a part of a SONET metropolitan fiber optic network.

52. The method of claim 33, wherein said plurality of fiber optic ports of said optical communication module are configured as an array having a density of about 0.1 inch per port.

53. The method of claim 33, wherein said plurality of fiber optic ports of said optical communication module are configured as a single-wafer array.

54. A fiber optic communication assembly, comprising:

an optical communication module having a plurality of fiber optic ports, said plurality of fiber optic ports being configured as a single-wafer array, at least a first one of said plurality of fiber optic ports being signal-independent from at least a second one of said fiber optic ports;

a plurality of fiber optic conductors each having a first end and a second end providing an optical communication path therebetween, each of said plurality of fiber optic conductors being coupled at its first end to one of said plurality of fiber optic ports, said first ends of said plurality of fiber optic conductors being disposed in adjacent parallel relationship at said plurality of fiber optic ports;

wherein a first one of said fiber optic conductors is coupled to said first one of said plurality of fiber optic ports to form a first signal-independent optical communication path, and wherein a second one of said plurality of fiber optic conductors is coupled to said second one of said plurality of fiber optic ports to form a second signal independent optical communication path; and

wherein said first signal-independent optical communication path is physically distinct from said second signal-independent optical communication path.

55. The fiber optic communication assembly of claim 54, wherein said plurality of fiber optic ports of said optical communication module are configured as an array having a density of about 0.1 inch per port.